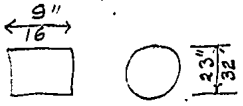
Notebooks by Edison
Notebook, N-18-07-20

This notebook was used by Edison and Frederick P. Ott in July 1918. The book consists primarily of lists of compounds to be tried in chalk telephone cylinders. There is an index to the lists on pages 180-181. Inserted into the book are instructions from Edison to Ott, along with other loose notes. The front cover is labeled "Chalk Telephone (Lists)." The book contains 190 numbered pages preceded by 3 unnumbered pages. Many of the pages are blank.

2.5
1.3
3.7

7.5
0.7
8.2

Cylinders for Press July 20-21/15



1 - Kieselghur Blg #4

2.5 gms Kieselghur + 1.2 c.c. water ✓
67.6% " + 32.4% "
300 atmos.

China Clay Lion Brand CB. Crystal N.Y.
5.25 gms China Clay. no water ✓
100% "
200 atmos.

Rotten Stone (Smoke) Keystone Chemical Co.
4.5 gms — no water ✓
100%
200 atmos.

Lithophone (Ponolith) Kuhn Pigment and Chemical Co.
200 atmos.
7.5 gms no water ✓

Blanc Fix Chlinchfield Products Corporation Johnson City Tenn.
7.5 gms no water ✓
200 atmos.

Fe2 reads from Oxalate for Mr. Edison
6.5 gms Fe2 + 0.7 cc. water
90.28% Fe2 + 9.72% water
200 atmos.

Iron Oxide from Muffle Fe 4625-28

.65 grms. Iron Oxide + 0.5 cc. water

92.85% " + 7.15% water ✓

200 atmos.

Strontium Oxide (hydr. cryst. CP).

4.75 grms — 11D water. ✓

200 atmos.

Acid Tungstic CP. (Crystals powdered).

7.65 grms - no water. ✓

200 atmos.

1	2	3	4	5	6	7
Material	Quantities for a 1in cylinder 23/32" Dia by about 7/16" Length		Percentages		Pressure Atmospheres	Critical Length of cylinder using quantities given in Columns 2 & 3 respectively
	Material	Water	Material	Water		
	grams	c.c	%	%		
BLANC FIX Chlinchfield Products Corporation, Johnson City, Tenn.	7.5	0	100	0	200	1/2"
CHINA CLAY Kings Brand C.B. Chrystal, N.Y.	5.25	0	100	0	200	1/2"
KISSELGHUR Bld. 24.	2.5	1.2	67.6	32.4	300	15/32"
ROTTEN STONE (SMOKE) Agate Chemical Co.	4.5	0	100	0	200	29/64"
LITHOPHONE (Ponolith) Reds Pigment + Chemical Co.	7.5	0	100	0	200	29/64"
ACID. TUNGSTIC C.P.	7.65	0	100	0	200	7/16"
STRONTIUM OXIDE (Hydr. cryst. C.P.) Eimer + Amend.	4.75	0	100	0	200	7/16"
IRON OXIDE from Muffle Fe4625-28	6.5	0.5	92.85	7.15	200	29/64"
Fe made from Oxalate	6.5	0.7	90.28	9.72	200	7/16"

Blanc Fix

China Clay	5.25 gms at 200 atm.
Kieselghur	2.5 gms (67.6%) + 1.2 cc (32.4%) 2% KOH Soln 300 atm.
Potterstone	4.5 gms at 200 atm
Lithophone	7.9 gms (95.2%) + 0.4 cc. (4.8%) 2% KOH Soln. 400 atm.

ACIDS

Tungstic	96.6% 8.5 gms + 0.3 cc H_2O 3.4%	300 atm.
Antimonic		
Molybdic		

Press in Chemical room 5" ram

Light Calcined Magnesia

Pressed dry 4.5 grams to make roll at
750 lbs 13/32 thick pressure O.K.

500 lbs 3.9 grams to make one roll 13/32 thick
Dry pressed

1000 lbs 4.4 grams to one roll
Dry pressed

1500 lbs 4.7 grams to one roll
Dry pressed

400 lbs 4. grams to one roll
Dry pressed

300 lbs 3.6 grams to one roll Dry pressed

200 lbs 3.4 grams to one roll
Dry pressed

100 lbs 3. grams to one roll
Dry pressed

MAGNESIUM

Silicate
Hydroxide
Citrate
Ethyl Sulphate
Oxalate
Fluoride
Formate
Sulphite
Acetate

made in 3 different ways Nos 1, 2, 3.

Oxide (Light Calcined Magnesia)
Carbonate
Phosphate
Borate

See page # 6

STRONTIUM

Oxide
Carbonate
Carbonate and Aluminum Hydroxide - Mixture
Antimoniate
Oxalate
Fluoride
Sulphate
Salicylate
Borate
Arsenate

CADMIUM

Oxide
Hydroxide

IRON

Oxide
Ferric Hydroxide
Citrate
Borate (Ferric)
Sulphide (Lumps Reagent)
Tannate (Ferrum)
Carbonate (Pure)
Phosphate, Ferrous true.
Iron by H made from Am Fe SO_4 Crystals No Hg O.
Oxalate (Ferric)
Hydroxide, Colloidal Ferric

NICKEL

Oxide
Hydroxide
Citrate
Oxalate
- Ammonium Sulphate

BARIUM

Carbonate
Antimoniate
Ferrate
Hydroxide
Borate
Arsenate
Phosphate
Sulphate (Blanc Fix)

CALCIUM

Tungstate
Ferrocyanide
Hydroxide
Sulphide
Silicate
Arsenate
Oxalate
Chromic
Citrate
Acetate
Sulphate

SODIUM

Uranate, (Yellow Hydrated)
Antimoniate

BISMUTH

Oxide
Hydroxide
Oxychlorate (oxychloride)
Sub-carbonate

LITHIUM

Phosphate
Carbonate

ALUMINUM

Hydroxide

Oxide · pure Anhyd. (Can't make)

Chromate

~~Alumin Sulphate CP~~

MAGNESIUM - AMMONIUM

Phosphate

TIN

Hydroxide (Stannous)
Oxide, Black (Stannous)

ZINC

Hydroxide
Oxalate
Carbonate
~~Bromide~~ Silicate
Oxide
Sulphate

MERCURY

Hydroxide (Mercuric)
Oxide (Red)

LEAD

Hydroxide
Oxide (Yellow, PbO)
Phosphate (Highest Purity)
Nitrate
Peroxide

MANGANESE

Hydroxide (Manganic)
Acetate
Oxide, Black
Carbonate
Borate

COBALT

Hydroxide (Cobaltic)
Sulphate

COPPER

Hydroxide (cupric)
Oxide
Carbonate

CHROMIUM

Hydroxide (chromic)
Colloidal Hydroxide (chromic)

ORGANIC

Anthracene
P. Amido Phenol
P. Amido Phenol Hydrochloride
Para Phenylene Diamine Recrystl. from Benzol M.P. 140°C.
Benzidine
Benzidine Sulphate
Naphthalene

OXIDES

Strontium
Iron
Cadmium
Nickel
Bismuth
Magnesium (light Calcined Magnesia)
Aluminum
Zinc
Mercury (Red)
Tin, Black (Stannous)
Manganese, (Black)
Copper
Lead

CARBONATES

Barium
Strontium
Mixture Str Carb. and Al. Hydrox.
Magnesium
Iron
Zinc
Manganese
Copper
Lithium

SILICATE

Magnesium
Calcium

TUNGSTATE

Calcium

URANATE

Sodium (Yellow Hydrated)

PHOSPHATE

Lithium
Magnesium-Ammonium
Magnesium
Barium
Ferrous (true)
Lead

HYDROXIDE

Aluminum

" and Strontium Carbonate Mixture

Ferric

Calcium

Magnesium

Stannous

Zinc

Bismuth

Mercuric

Lead

Cadmium

Manganic

Cobaltic

Nickel

Cuporic

Chromic

Barium

Ferric, (Colloidal)

Chromic, (Colloidal)

ANTIMONIATE

Barium
Sodium
Strontium

FERRATE

Barium

Citrate

Magnesium
Calcium
Iron
Nickel

ETHYL SULPHATE

Magnesium

OXALATE

Magnesium
Calcium
Strontium
Ferric
Zinc
Nickel

FLUORIDE

Magnesium
Strontium

FORMATE

Magnesium

SULPHITE

Magnesium

ACETATE

Magnesium
Calcium
Manganese

SULPHIDE

Calcium
Iron

ARSENATE

Calcium
Barium
Strontium

CHROMIC

Calcium

SULPHATE

Calcium (Plaster of Paris)
Strontium
Zinc
Nickel-Ammonium
Cobalt

BORATE

Barium
Strontium
Ferric
Manganese
Magnesium

SALICYLATE

Strontium

TANNATE

Ferrum

CHROMATE

Aluminium

BROMIDE

Zinc Silique

NITRATE

Lead

PEROXIDE

Lead

SUB CARBONATE

Bismuth

Oxychlorate

Bismuth

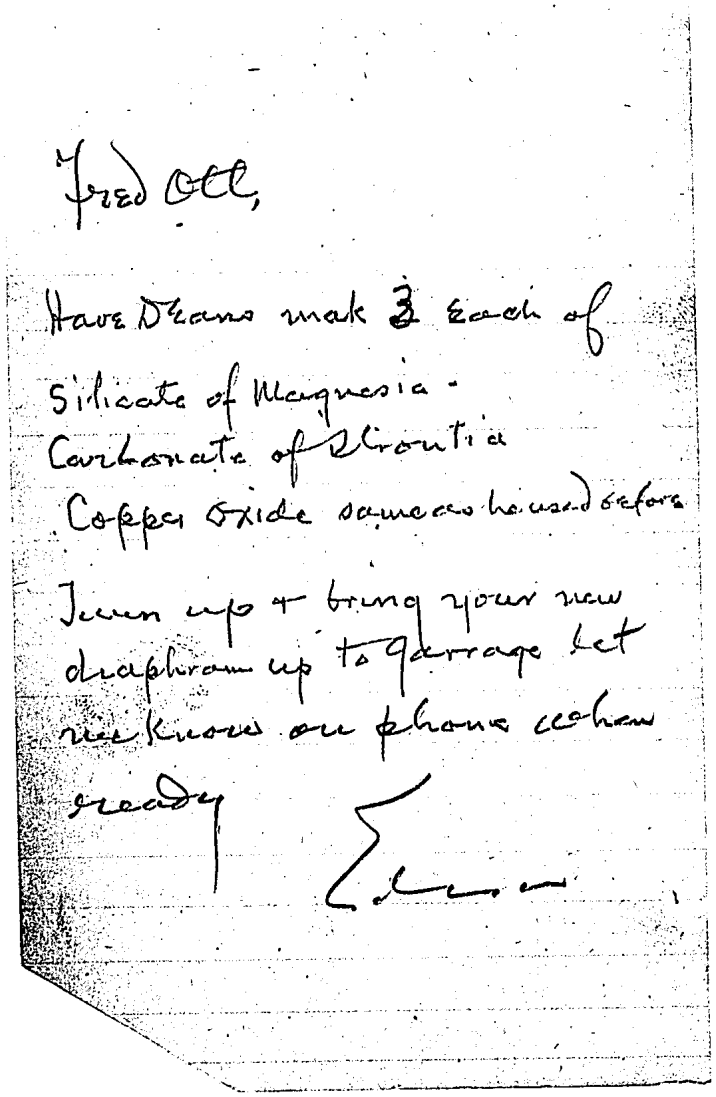
FERROCYANIDE

Calcium

Acids	5	Organic	90
Magnesium	7		
Strontium	7		
Cadmium	9		
Iron	9		
Nickel	11		
Barium	11		
Calcium	13		
Sodium	13		
Bismuth	15		
Lithium	15		
Aluminium	17		
Magnesium Ammonium	19		
Tin	21		
Zinc	21		
Mercury	23		
Lead	23		
Manganese	25		
Cobalt	25		
Copper	27		
Chromium	27		

Oxides	101	Sub-Carbonate	129
Carbonates	101	Oxychlorate	129
Silicate	103	Ferrocyanide	131
Tungstate	103		
Uranate	105		
Phosphate	105		
Hydroxide	107		
Antimoniate	109		
Ferrate	109		
Citrate	111		
Ethyl Sulphate	111		
Oxalate	113		
Fluoride	113		
Formate	115		
Sulphite	115		
Acetate	117		
Sulphide	117		
Arsenate	119		
Chromic	119		
Sulphate	121		
Borate	121		
Salicylate	123		
Tannate	123		
Chromate	125		
Bromide	125		
Nitrate	127		
Peroxide	127		

[ITEMS(S) FOUND IN BOOK]



Fred Ott,

Have Deans mak 3 each of
Silicate of Magnesia -
Carbonate of Strontia
Copper Oxide same as he used before

Jesse up + bring your new
diaphram up to garrage let
me know on phone so how
ready

Thos

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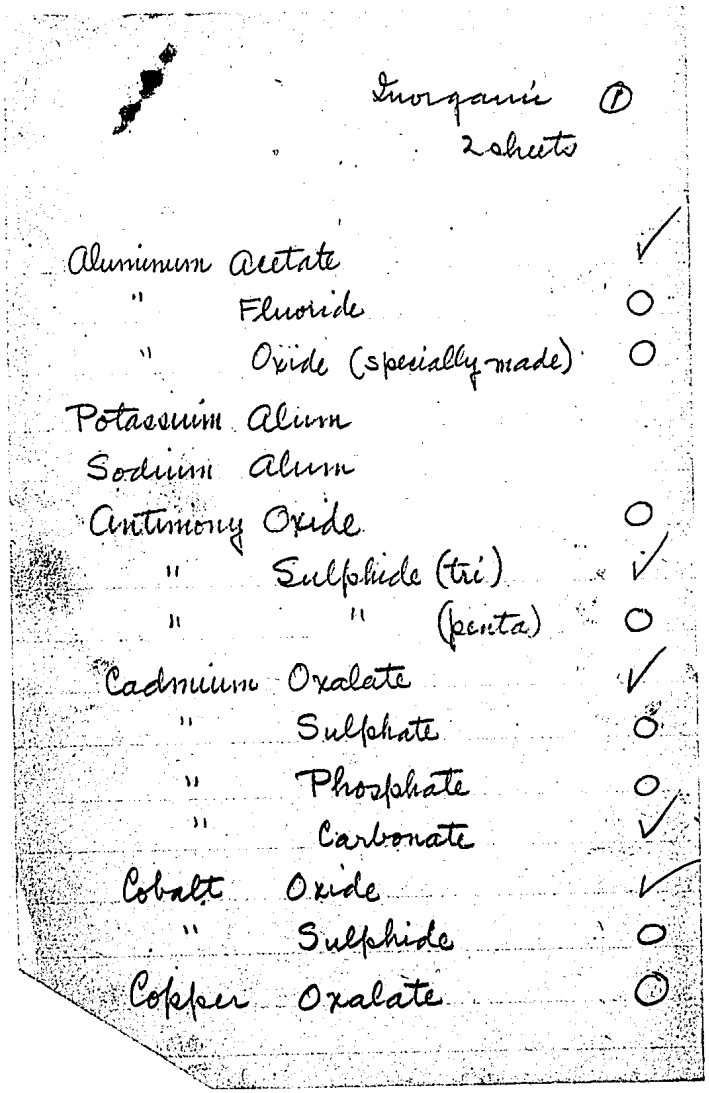

Inorganic (1)
2 sheets

Aluminum Acetate	✓
" Fluoride	O
" Oxide (specially made)	O
Potassium Alum	
Sodium Alum	
Antimony Oxide	O
" Sulphide (tri)	✓
" " (penta)	O
Cadmium Oxalate	✓
" Sulphate	O
" Phosphate	O
" Carbonate	✓
Cobalt Oxide	✓
" Sulphide	O
Copper Oxalate	O

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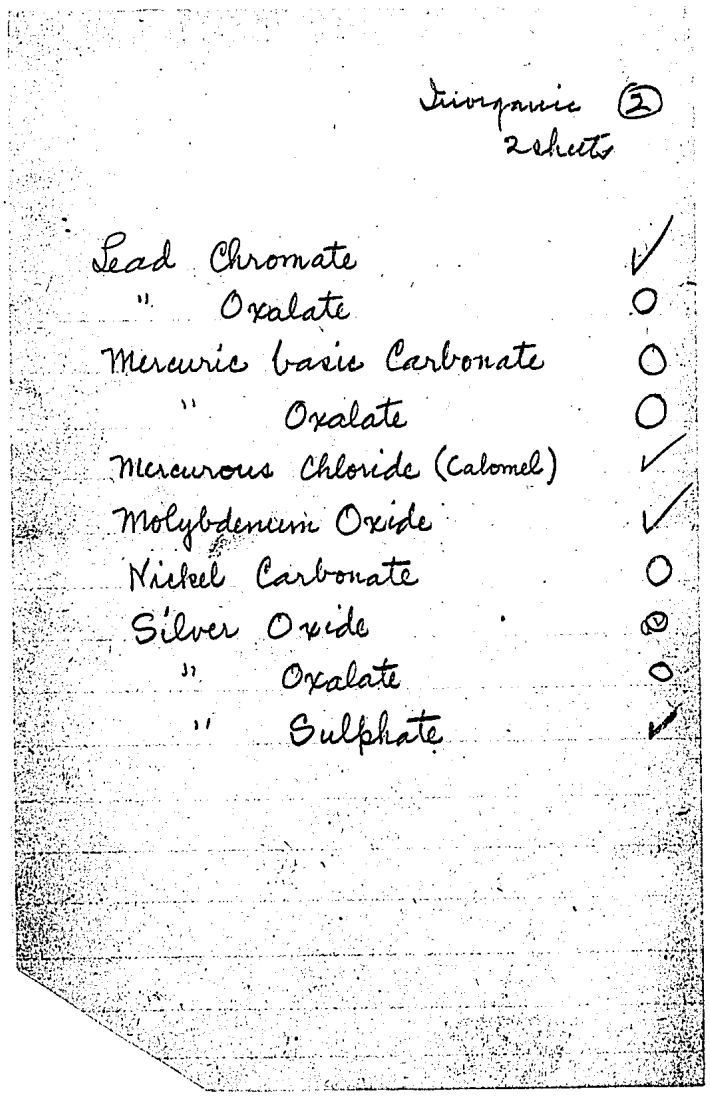

Inorganic (2)
2 sheets

Lead Chromate	✓
" Oxalate	O
Mercuric basic Carbonate	O
" Oxalate	O
Mercurous Chloride (Calomel)	✓
Molybdenum Oxide	✓
Nickel Carbonate	O
Silver Oxide	✓
" Oxalate	O
" Sulphate	✓

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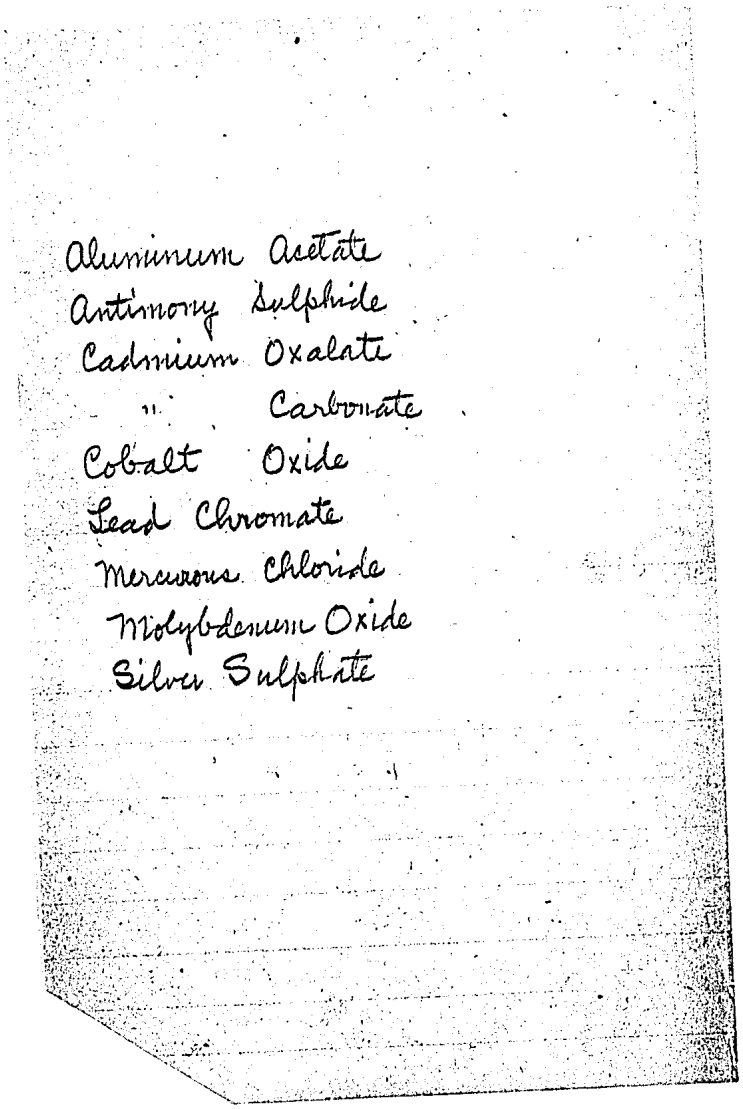

Aluminum Acetate
Antimony Sulphide
Cadmium Oxalate
" Carbonate
Cobalt Oxide
Lead Chromate
Mercurous Chloride
Molybdenum Oxide
Silver Sulphate

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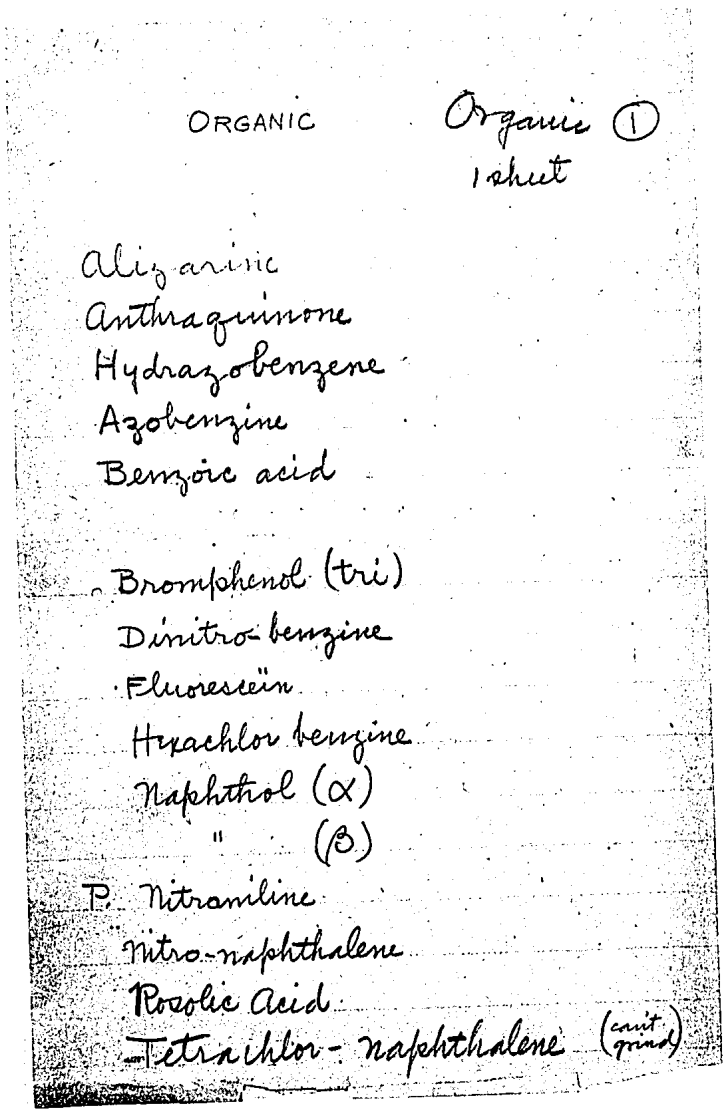

ORGANIC

Organic (1)
1 sheet

Alizarine
Anthraquinone
Hydrazobenzene
Azobenzine
Benzoic acid

Bromphenol (tri)
Dinitro-benzine
Fluoresceïn
Hexachlor benzine
Naphthol (α)
" (β)
P. Nitraniline
Nitro-naphthalene
Rosolic Acid
Tetrachlor-naphthalene (can't grind)

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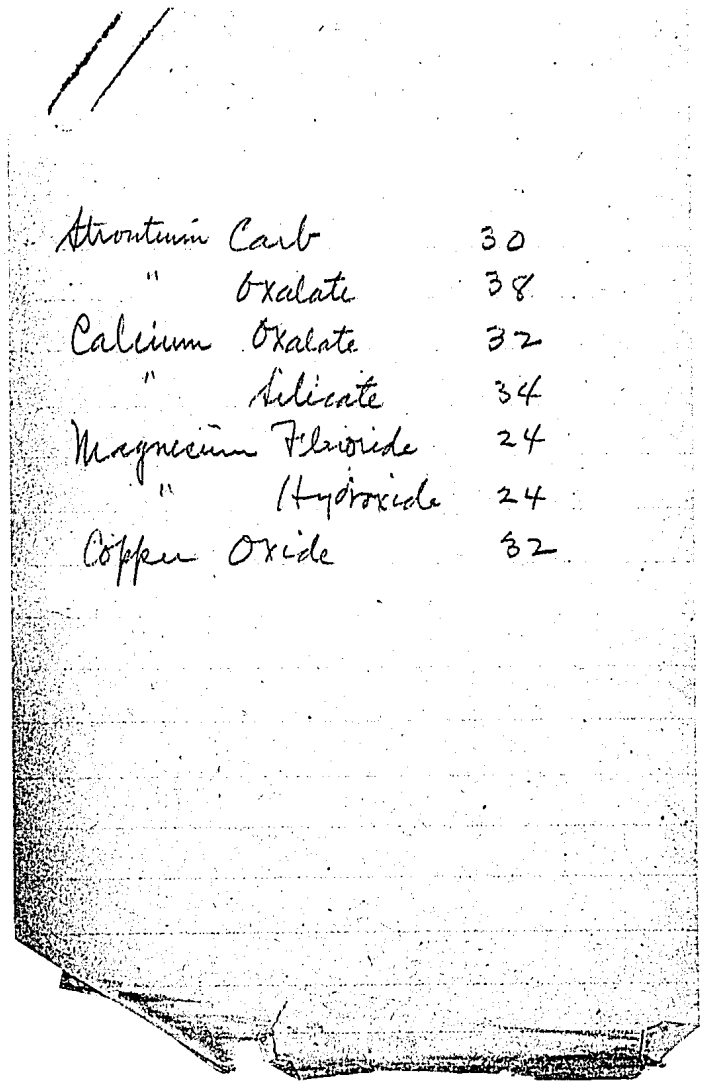

Strontium Carb 30
" Oxalate 38
Calcium Oxalate 32
" Silicate 34
Magnesium Fluoride 24
" Hydroxide 24
Copper Oxide 32

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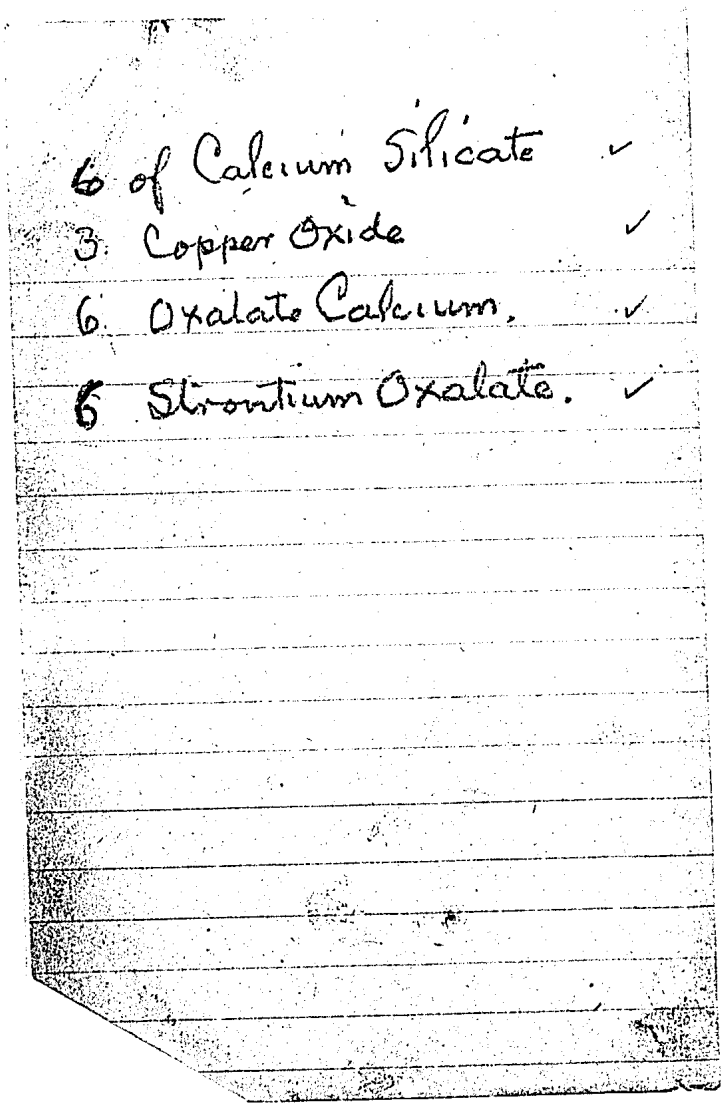
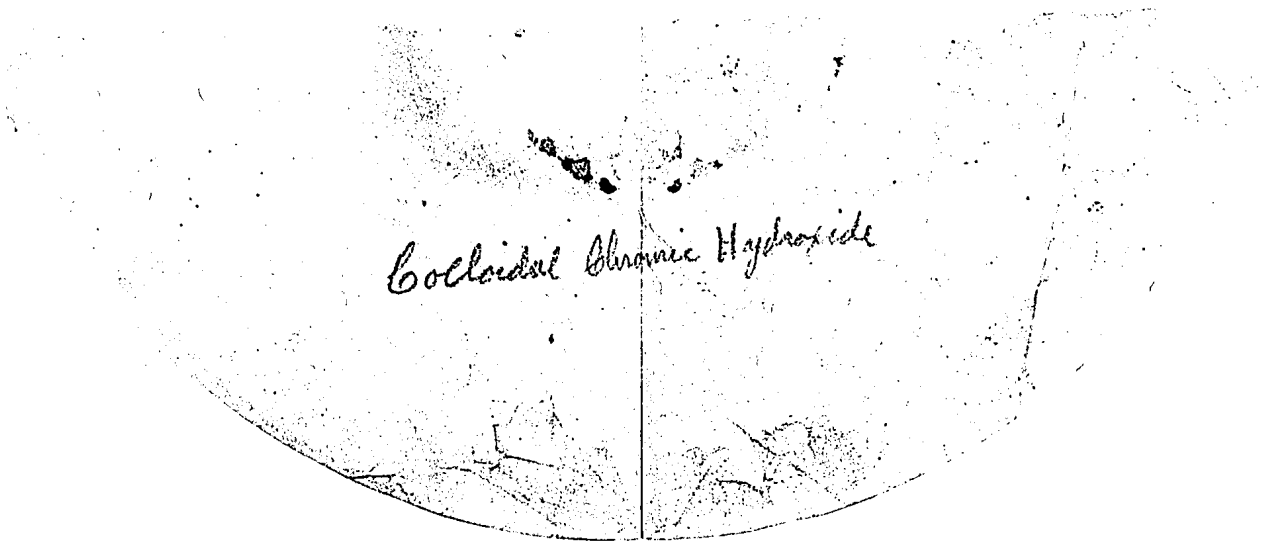

6 of Calcium Silicate ✓
3 Copper Oxide ✓
6 Oxalate Calcium. ✓
6 Strontium Oxalate. ✓

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